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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,813	09/30/1999	KLAUS BUCHENRIEDER	P99.1885	5914

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EXAMINER
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MIRZA, ADNAN M

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/409,813

Applicant(s)

BUCHENRIEDER ET AL.

Examiner

Adnan M. Mirza

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1 are rejected under 35 U.S.C. 102(a) as being unpatentable by Nelson et al (U.S. 5,812,857).

As per claims 1 Nelson disclosed a method for operating a first computer that is connected to a network, the method comprising the steps of: providing that the computer have an FPGA hardware structure which may be physically reconfigured; loading first configuration data including a software portion and a hardware portion for a first task (col. 4, lines 41-50), allocated to the first computer (col. 3, lines 21-39), into the first computer via the network wherein the loading is initiated either independently or in response to a specific request (col. 4, lines 41-50); automatically reconfiguring the FPGA hardware structure of the first computer with the aid of the hardware portion of the first configuration data so that the first computer exhibits a hardware structure adjusted to the first task (Fig. 4, element 41, col. 5, lines 1-28 & col. 4, lines 23-26)), and processing the first task with the first computer configured with the first configuration data (col. 5, lines 25-45). Nelson's stated Network drivers that can be interpreted software component for network devices (e.g. Network cards, NICS) that are hardware components of the computer system. Nelson also taught that once the new drivers are available on the network and being

Art Unit: 2145

downloaded on the computer system resulted in automatically overwriting the old drivers or configuring with the updated new features of the drivers.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al (U.S. 6,012,088) and in view of Tang et al (U.S. 6,298,370).

As per claims 1 Li disclosed a method for operating a first computer that is connected to a network, the method comprising the steps of: providing that the computer have an FPGA hardware structure which may be physically reconfigured; loading first configuration data including a software portion and a hardware portion for a first task, allocated to the first computer (col. 9, lines 13-25), into the first computer via the network wherein the loading is initiated either independently or in response to a specific request (col. 9, lines 26-32 & lines 50-59); automatically reconfiguring the FPGA hardware structure of the first computer with the aid of the hardware portion of the first configuration data so that the first computer exhibits a hardware structure configured to the first task (col. 12, lines 44-48 & col. 3, lines 54-61).

Art Unit: 2145

However Li failed to disclose processing the first task with the first computer configured with the first configuration data. In the same field of endeavor Tang disclosed processing the first task with the first computer with the first configuration data (col. 3, lines 35-50).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated processing the first task with the first computer configured with the first configuration data as taught by Tang in the method of Li to reduce the latency by doing multitasking.

6. As per claims 2 Li-Tang disclosed A method for operating a first computer as claimed in claim 1 further comprising the step of: configuring, prior to completion of the step of processing the first task, a part of the hardware of the computer that is no longer necessary for the step of processing the first task (Tang, col. 24, lines 54-61), for processing a second task by loading second configuration data allocated to the second task into the computer via the network (Tang, col. 128, lines 34-64).

7. As per claims 3 Li-Tang disclosed a method further comprising the step of processing the second task prior to the completion of the step of processing the first task (Tang, col. 128, lines 34-64).

***Response to Arguments***

Applicant's arguments filed 01/24/2005 have been fully considered but they are not persuasive.

Response to applicant's argument are as follows:

8. Applicant argued that prior art did not disclose to configure the hardware architecture of the network computer.

As to applicant argument Nelson disclosed a single set of network driver code for both downloading purposes and implementation of feature function. It is further object of the present invention to provide a means to download new download code, including new network drivers, to a field configurable embedded computer system installed at a customer site in the field (col. 3, lines 29-35). Move computer code from a master computer to configurable embedded computer system during a download (col. 5, lines 1-3)

9. Applicant argued that prior art did not disclose modifying or structuring the hardware of the network computer using the configuration data in any respect.

As to applicant's argument Li disclosed that the Internet access device is able to automatically configure itself for communications with the Internet using information contained in the configuration record (col. 14, lines 53-56). It should be appreciated that the configuration record may contain any other information needed by the Internet access device to automatically

Art Unit: 2145

configure itself for communication with a wide variety of communication lines in order to connect to the Internet (col. 14, lines 66-67, col. 15, lines 1-3).

10. Applicant argued that prior art did not disclose a computer network which receives configuration data and, in response thereto, configures the hardware of the network computer so as to obtain a hardware structure which is adjusted to the respective task.

As to applicant's argument Tang disclosed the Direct DSP software uses Microsoft's multitasking and multithreaded Windows OS and COM-based software to dynamically sense the system hardware capabilities when an application open, and when it loads/unloads hardware resources for plug and play (col. 31, lines 55-60). The DirectX COM-based API has an application query a system for hardware description and capabilities at run-time while substituting the absent hardware features with host emulation where possible (col. 31, lines 65-67 & col. 32 lines 1-2). For example, an application queries the DirectDSP API embodiment for system device configuration at run-time. DirectDSP in turn queries the DirectDSP HAL embodiment regarding the H/W device capabilities (col. 32, lines 12-15).

11. Applicant argued that prior art did not disclose the claimed feature of "loading first configuration data including a hardware portion and a software portion".

As to applicant's argument Nelson disclosed the download network driver section typically operates only when the device is selected to operate in download mode. The feature network

Art Unit: 2145

driver section only operates when the device is operating in its normal operating mode (col. 4, lines 46-50).

12. Applicant argues that prior art did not disclose a method whereby the physical hardware structure of computer may be configured.

As to applicant's argument Nelson disclosed, "to provide a means to download new download code, including network drivers, to a field configurable embedded system installed at a customer site in the field (col. 3, lines 32-5). Nelson's stated Network drivers that interpreted software component for network devices (e.g. Network cards, NICs) that are hardware components of the computer system. Nelson also taught that once the new drivers are available on the network and being downloaded on the computer system resulted in automatically overwriting the old drivers or configuring with the updated new features of the drivers.



***Conclusion***

**13. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**14.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin et al (U.S. 5,867,706) discloses the name convention of the resources over the network.

**15.** Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

**16.** The examiner can normally be reached on Monday to Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin Wallace can be reached on (571)-272-6159. The fax for this group is (703)-746-7239.

Art Unit: 2145

17. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label "PROPOSED" or "DRAFT");

(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED PROCEDURE"),

(703)-746-7238 (For After Final Communications).

18. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

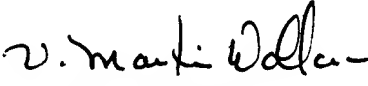
Or faxed to:

Hand-delivered responses should be brought to 4<sup>th</sup> Floor Receptionist, Crystal Park II,  
2021 Crystal Drive, Arlington, VA 22202.

AM

Adnan Mirza

Examiner

  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700